

# Acid Sulfate Soil Minor Works Fact Sheet



This fact sheet is to be read in conjunction with Council's 'Acid Sulfate Soil Management Plan for Minor Works' plan which together provides guidance for the management of acid sulfate soils where they are disturbed during **minor** works (involving disturbance of less than 10 tonnes of soil only) for the purposes of:

- Footings for single dwelling and duplex developments
- Sewer and stormwater drainage associated with single dwellings and duplex developments
- Swimming pools (residential only)
- Domestic On-site wastewater management facilities (e.g. septic tanks) and associated land application areas

## *Acid Sulfate Soils*

Acid Sulfate Soils (ASS) are extremely acidic, and sulphur rich soils found within the floodplain of coastal areas generally below RL 5m AHD. Potential Acid Sulfate Soils (PASS) is the common name given to soil and sediment containing iron sulfide (usually pyrite). They can become actual ASS and produce sulfuric acid if they become exposed to air through excavation or lowering of the watertable.

Problems caused by Acid Sulfate Soils include:

- Fish kills and aquatic habitat changes
- Corrosion of concrete, iron and steel
- Reduced plant growth – bare patches and scalds
- Poor foundation bearing capacity (clay sediments only)
- Iron staining of paths, driveways and retaining walls

## *Where does this plan apply?*

Under Clause 7.1 of the [Greater Taree City Council Local Environment Plan 2010](#) a person is required to obtain development consent to undertake works on land shown as being Class 1, 2a, 2b, 3, 4 or 5 on the Acid Sulfate Soil Planning Maps.

| <b>Class of Land</b> | <b>Specified Works</b>   |
|----------------------|--|
| 1                    | Any works.   |
| 2a                   | Works below the natural ground surface.<br>Works by which the watertable is likely to be lowered.  |
| 2b                   | Works other than ploughing below the natural ground surface.<br>Works by which the watertable is likely to be lowered.   |
| 3                    | Works more than 1 metre below the natural ground surface.<br>Works by which the watertable is likely to be lowered more than 1 metre below the natural ground surface. |
| 4                    | Works more than 2 metres below the natural ground surface.<br>Works by which the watertable is likely to be lowered beyond 2 metres below the natural ground surface.  |
| 5                    | Works within 500 metres of Class 1, 2, 3 or 4 land which are likely to lower the watertable below 1 metre AHD in adjacent Class 1, 2a, 2b, 3 or 4 land                 |

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Under Clause 7.1 of the [Great Lakes Council Local Environment Plan 2014](#) a person is required to obtain development consent to undertake works on land shown as being Class 1, 2, 3, 4 or 5 on the Acid Sulfate Soil Planning Maps.

| Class of Land | Specified Works  |
|---------------|--|
| 1             | Any works.   |
| 2             | Works below the natural ground surface.<br>Works by which the watertable is likely to be lowered.  |
| 3             | Works more than 1 metre below the natural ground surface.<br>Works by which the watertable is likely to be lowered more than 1 metre below the natural ground surface. |
| 4             | Works more than 2 metres below the natural ground surface.<br>Works by which the watertable is likely to be lowered beyond 2 metres below the natural ground surface.  |
| 5             | Works within 500 metres of Class 1, 2, 3 or 4 land which are likely to lower the watertable below 1 metre AHD in adjacent Class 1, 2, 3 or 4 land                      |

**An acid sulfate management plan is required for works in accordance with the above tables as applicable to the relevant class of land.**

**Council must not grant consent unless it has considered:**

- a. A preliminary soil assessment to ascertain the presence or absence of acid sulfate soils within the area of proposed works unless the applicant agrees that acid sulfate soils are present within the area of proposed works; and
- b. Where the preliminary soil assessment ascertains (or the applicant agrees) that acid sulfate soils are present, the adequacy of an acid sulfate soils management plan prepared in accordance with guidelines, as amended from time to time, published by the Environment Protection Authority; and
- c. The likelihood of the proposed development resulting in the oxidation of acid sulfate soils and discharge of acid water from the area of the proposed works; and
- d. Any comments received from any relevant public authority the Council may consult with in respect of the application.

The guidelines nominated in (b) above (Acid Sulfate Soil Manual produced by the Acid Sulfate Soil Management Advisory Committee) require soil and water assessment including chemical analysis to develop a detailed management plan. However, the guidelines note that the level of assessment undertaken, or the complexity of an acid sulfate soils management plan, should match the level of risks to the environment from the proposed activity. Council has concluded that the risk to the environment from the defined minor works is very low and the conservative liming rates adopted will address any likely negative impacts.

*Exemption*

If the applicant can demonstrate the land has been lawfully filled, and any excavation will not extend below the depth of the fill, consent and thus an Acid Sulfate Soil Management Plan is not required.

## Acid Sulfate Soil Planning Maps

The NSW Department of Land & Water Conservation have produced maps which indicate the likely presence of acid sulfate soils and what depth below natural ground surface they may be expected to occur. These maps may be viewed on-line on the MidCoast Council website or at Council offices.

Figure: Acid Sulfate Soils (LEP) map for the MidCoast Council Local Government Area

